

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A video encoding apparatus for encoding a video image comprising:

a first feature amount computing device configured to compute a statistical feature amount for each frame of the video image by analyzing an input video signal representing the video image;

B¹⁷ a scene dividing device configured to divide the video image into a plurality of scenes in accordance with the statistical feature amount, each of the scenes including a frame or continuous frames ~~in accordance with the statistical feature amount~~;

a second feature amount computing device configured to compute an average feature amount for each of the ~~senses~~ scenes using the feature amount obtained by the first feature amount computing device;

~~a scene selector configured to select a part of the scenes or all of the scenes;~~

an encoding parameter generator configured to generate an encoding parameter including at least an optimum frame rate and quantization step size for each of the scenes using the average feature amount ~~of the scene selected by the scene selector~~; and

an encoder configured to encode the input video signal in accordance with the encoding parameter generated for each of the scenes by the encoding parameter generator.

Claim 2 (Original): An apparatus according to claim 1, wherein the scene selector is configured to select the scenes in accordance with operation information obtained by editing performed by an user.

Claim 3 (Original): An apparatus according to claim 2, which includes a scene content providing device configured to provide feature of each of the scenes to the user.

Claim 4 (Original): An apparatus according to claim 3, wherein the scene content providing device provides a key-frame of each scene or a thumb nail thereof to the user.

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Claim 5 (Currently Amended): An ~~Apparatus~~ apparatus according to claim 3, wherein the scene content providing device provides a symbol indicating the average feature amount or feature obtained for each scene by the second feature amount computing device to the user.

Claim 6 (Currently Amended): An apparatus according to claim 3, wherein the scene content providing device provides a key-frame of each scene or a thumb nail thereof and a symbol indicating the average feature amount or feature obtained for each scene by the second feature amount computing device to the user.

Claim 7 (Currently Amended): An apparatus according to claim 1, wherein the statistical feature amount includes at least some of ~~the~~ number of motion vectors, distribution, norm size, residual error after motion compensation, and variance of luminance and chrominance.

Claim 8 (Currently Amended): A video encoding method comprising:
computing a statistical feature amount every frame by analyzing an input video signal;

dividing a video image into scenes in accordance with the statistical feature amount,
each of the scenes formed of a frame or continuous frames ~~in accordance with the statistical
feature amount~~;

computing an average feature amount for each of the scenes ~~senses~~, using the
statistical feature amount;

~~selecting a part of the scenes or all of the scenes~~;

generating an encoding parameter including at least an optimum frame rate and
quantization step size for each of the scenes, using the average feature amount ~~of each scene~~
~~selected~~; and

B'7 encoding the input video signal in accordance with the encoding parameter generated
for each of the scenes.

Claim 9 (Original): A method according to claim 8, wherein the scene selecting step
selects the scenes in editing performed by an user.

Claim 10 (Original): A method according to claim 9, which includes providing
feature of each of the scenes to the user.

Claim 11 (Original): A method according to claim 10, wherein the scene content
providing step provides a key-frame of each scene or a thumb nail thereof to the user.

Claim 12 (Currently Amended): A method according to claim 10, wherein the scene
content providing step provides a symbol indicating the average feature amount or feature
obtained for each scene to the user.

Claim 13 (Currently Amended): A method according to claim 10, wherein the scene content providing device provides a key-frame of each scene or a thumb nail thereof and a symbol indicating the average feature amount or feature obtained for each scene to the user.

Claim 14 (Currently Amended): A computer program stored on a computer readable medium, comprising:

instruction means for instructing a computer to compute a statistical feature amount every frame by analyzing an input video signal;

B'7 instruction means for instructing the computer to divide a video image into scenes in accordance with the statistical feature amount, each of the scenes formed of a frame or continuous frames ~~in accordance with the statistical feature amount~~;

instruction means for instructing the computer to compute an average feature amount for each of the scenes ~~senses~~, using the statistical feature amount;

~~instruction means for instructing the computer to select a part of the scenes or all of the scenes;~~

instruction means for instructing the computer to generate an encoding parameter including at least an optimum frame rate and quantization step size for each of the scenes, using the average feature amount ~~of each scene selected~~; and

instruction means for instructing the computer to encode the input video signal in accordance with the encoding parameter generated for each of the scenes.
